ENVIRONMENTAL COMPLIANCE SUMMARY

CALENDAR YEAR 1997

Introduction: Compliance Program

The primary mission of the West Valley Demonstration Project (WVDP) is to develop and demonstrate a safe method of solidifying high-level radioactive mixed waste. Vitrification, the selected method, incorporates radioactive and hazardous materials into a glass-like substance. The treatment process is regulated by various federal and state laws in order to protect the public, workers, and the environment.

The U.S. Department of Energy (DOE), the federal agency that oversees the WVDP, established its policy concerning environmental protection in DOE Order 5400.1, "General Environmental Protection Program." This Order lists the regulations, laws, and required reports that are applicable to DOE-operated facilities. DOE Orders 5400.1 and 231.1 require the preparation of this annual Site Environmental Report, which is intended to summarize environmental data gathered during the calendar year, describe significant programs, and confirm compliance with environmental regulations.

The major federal environmental laws and regulations that apply to the West Valley Demonstration Project are the Resource Conservation and Recovery Act, the Clean Air Act, the Emergency Planning and Community Right-to-Know Act, the Clean Water Act, the Safe Drinking Water Act, the Toxic Substances Control Act, and the National Environmental Policy Act. These laws are administered primarily by the U.S. Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation (NYSDEC) through state programs and regulatory requirements such as permitting, reporting, inspecting, and performing audits.

In addition, because the emission of radiological and nonradiological materials from an active facility cannot be completely prevented, the EPA, NYSDEC, and the DOE have established standards for such emissions to protect human health and the environment. The WVDP applies to NYSDEC and the EPA for permits that allow the site to release limited amounts of radiological and nonradiological constituents through controlled and monitored discharges of water and air. These concentrations have been determined to be safe for humans and the environment. In general, the permits describe the discharge points, list the limits on those pollutants likely to be present, and define the sampling and analysis schedule.

Environmental inspections and audits are conducted routinely by the EPA, NYSDEC, the New

York State Department of Health (NYSDOH), and the Cattaraugus County Health Department. On-site and off-site radiological monitoring in 1997 confirmed that site activities were conducted well within state and federal regulatory limits. On-site nonradiological effluent monitoring, with only a few exceptions, also confirmed that site effluents remained within permitted limits. These exceptions of nonradiological limits, also commonly called exceedances, are described in more detail under the *Clean Air Act* section (p.xlix) and the *Clean Water Act* section (p.lii). Although the exceedances did not have any significant adverse environmental effects, the WVDP continues to make efforts to eliminate the potential for these exceedances to recur.

Management at the WVDP continued to provide strong support for environmental compliance issues in 1997. DOE Orders and applicable state and federal statutes and regulations are integrated into the compliance program at the Project, demonstrating a commitment to protecting the public and the environment while working towards the WVDP goal of high-level radioactive mixed waste vitrification.

The following environmental compliance summary describes the federal and state laws and regulations that are applicable to the WVDP and the relevant environmental compliance activities that occurred at the WVDP in 1997.

Compliance Status

Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act (RCRA) was enacted to ensure that hazardous wastes are managed in a manner that protects human health and the environment. RCRA and its implementing regulations govern hazardous waste generation, treatment, storage, and disposal. Under RCRA, generators are responsible for ensuring the proper treatment, storage, and disposal of their wastes.

The EPA is the federal agency responsible for issuing guidelines and regulations for the proper management of solid and hazardous waste. In New York, the EPA has delegated the authority to enforce these regulations to NYSDEC. In addition, in May 1990 the state of New York was authorized by the EPA to administer a radioactive and hazardous mixed waste program. The U.S. Department of Transportation (DOT) is responsible for issuing guidelines and regulations for the labeling, packaging, and spill-reporting provisions for hazardous wastes in transit.

Each facility that treats, stores (large quantities for more than 90 days), or disposes of hazardous waste at that facility must apply for a permit from the EPA (or authorized state). The permit defines the treatment processes to be used, the design capacities, the location of hazardous waste storage units, the design and operating criteria for disposal units, and the hazardous wastes to be handled.

In 1984 the DOE notified the EPA of hazardous waste activities at the WVDP, identifying the WVDP as a generator of hazardous waste. In June 1990 the WVDP filed a Part A Hazardous Waste Permit Application with NYSDEC for storage and treatment of hazardous wastes. Based on that application, the WVDP was granted interim status. The WVDP continues to update the RCRA Part A Permit Application as changes to the site's interim-status waste-management operations occur. The last update occurred in October 1995. No updates to the Part A Permit Application were needed in 1997.

Hazardous Waste Management Program

In order to dispose of hazardous wastes generated from on-site activities, the WVDP uses New York State-permitted transporters (pursuant to 6 NYCRR

Part 364) to ship RCRA-regulated wastes to permitted or authorized treatment, storage, or disposal facilities (pursuant to 6 NYCRR Part 373-1). Using these services, the WVDP shipped approximately 8.6 metric tons (9.5 tons) of nonradioactive, hazardous waste off-site in 1997. Of this amount, 1.5 metric tons (1.6 tons) were recycled by the treatment, storage, and disposal facilities (TSDFs).

Off-site hazardous waste shipments and their receipt at designated TSDFs are documented by signed manifests that accompany the shipment. If the signed manifest is not returned to the generator of the waste within the NYSDEC regulatory limit of forty-five days from shipment, an exception report must be filed and receipt of the waste confirmed with the TSDF. No exception reports were required to be filed in 1997.

Hazardous waste activities must be reported to NYSDEC every year through the submittal of an annual Hazardous Waste Generator's Report. This report summarizes the hazardous waste activities for the previous year, specifies the quantities of hazardous waste generated, treated, and/or disposed of and identifies the TSDFs used. In addition, a hazardous waste reduction plan must be filed every two years and updated annually. These plans document efforts to minimize the generation of hazardous waste and were first submitted to NYSDEC in 1990. The most recent Hazardous Waste Reduction Plan was submitted in July 1997. The next revision is due July 1998 and the next update is due July 1999.

An annual inspection to assess compliance with hazardous waste regulations was conducted by NYSDEC on March 21, 1997. The most recent EPA inspection occurred on July 24, 1996. No deficiencies were noted by either agency during the inspections.

Nonhazardous, Regulated Waste Management Program

The WVDP transported approximately 128.4 metric tons (141.6 tons) of nonradioactive, nonhazardous material off-site to solid waste management facilities in 1997. Of this amount, 0.7 metric tons (0.8 tons) were recycled or reclaimed. The industrial waste materials included items such as monitoring-well purge water and neutralized acids and bases from laboratory and chemical mixing operations. Some of the regulated materials were managed as recyclable materials. These included lead acid batteries from which the lead was reclaimed and nonhazardous oils, which were recycled at off-site authorized reclamation and recycling facilities. The WVDP also shipped approximately 2,305 metric tons (2,541 tons) of digested sludge and untreated wastewater from the site sanitary and industrial wastewater treatment facility to the Buffalo Sewer Authority for treatment in 1997.

Radioactive Mixed Waste (RMW) Management Program

Radioactive mixed waste (RMW) contains both a radioactive component, regulated under the Atomic Energy Act (AEA), and a hazardous component, regulated under RCRA. Both the EPA and NYSDEC oversee RMW management at the WVDP. To address the management of the hazardous component of RMW, in March 1993 the DOE entered into a Federal and State Facility Compliance Agreement (FSFCA) with the EPA, NYSDEC, the New York State Energy Research and Development Authority (NYSERDA), and West Valley Nuclear Services Company, Inc. (WVNS), the primary contractor for the DOE at the WVDP. The FSFCA addresses requirements for managing the hazardous component of the RMW, e.g., regulatory compliance with the Land Disposal Restrictions (LDR) of RCRA for RMW specifies particular storage requirements for RMW

and requires the characterization of historical wastes in storage at the WVDP. In August 1997 a one-year extension of the FSFCA was requested to provide the additional time needed to characterize RMW stored in the chemical process cell waste storage area (CPC-WSA).

In November 1997 NYSDEC granted a one-year extension exclusively for section 7.2, Waste Analysis, to complete the final characterization of containers that could store RMW. Characterization of historical wastes continued during 1997. The remainder of the FSFCA agreement expired on March 22, 1998.

The Federal Facility Compliance Act (FFCAct) of 1992, an amendment to RCRA, was signed into law on October 6, 1992. The FFCAct requires DOE facilities to develop treatment plans for RMW inventories and to enter into agreements with regulatory agencies that require the treatment of the inventories according to the approved plans.

DOE facilities were required to develop site treatment plans in three steps: conceptual, draft, and proposed. The WVDP's conceptual plan was submitted to NYSDEC in October 1993 and the draft plan in August 1994. The WVDP submitted the proposed site treatment plan to NYSDEC in March 1995. The proposed plan is comprised of two volumes: the Background Volume and the Plan Volume. The Background Volume provides information on each RMW stream as well as information on the preferred treatment method for the waste. The Plan Volume contains proposed schedules for treating the RMW to meet the LDR requirements of RCRA. Each submittal to NYSDEC underwent a public comment period during which input was solicited from WVDP stakeholders.

The DOE and NYSDEC entered into a consent order on September 3, 1996, that requires the completion of the milestones identified in the Plan Volume. The WVDP began implementing the site treatment plan immediately. The WVDP updated the Site Treatment Plan in 1997 to bring waste stream and inventory and treatment information current to the end of fiscal year 1996. An update of fiscal year 1997 activities will be prepared in 1998. All Plan Volume milestones for calendar year 1997 were met.

RCRA Facility Investigation (RFI) Program

The DOE and NYSERDA entered into a RCRA 3008(h) Administrative Order on Consent with NYSDEC and the EPA in March 1992. The Consent Order requires NYSERDA and the DOE's West Valley Demonstration Project Office (DOE-WV) to conduct RCRA facility investigations at solid waste management units (SWMUs) in order to determine if there has been a release or if there is a potential for release of RCRA-regulated hazardous waste or hazardous constituents from SWMUs.

Because of the proximity of some of the units to each other, twenty-five SWMUs were grouped into twelve super solid waste management units (SSWMUs) to facilitate investigative efforts under the RCRA facility investigation (RFI) program.

In general, the purpose of a RCRA facility investigation is to collect and evaluate information to determine which of the following actions are appropriate for each SWMU or SSWMU in accordance with the Consent Order: no further action; a corrective measures study; or additional investigations to support either no further action or a corrective measures study. The RFI addresses RCRA-regulated hazardous wastes or hazardous constituents. To define and assess the environmental settings, unit and waste characteristics, and the potential sources and extent of nonradiological contamination, the WVDP has reviewed existing information and collected and analyzed samples of surface soil, subsurface soil, sediment, and groundwater.

In 1997 the WVDP continued to monitor and evaluate SWMUs to ensure compliance with the requirements of the RCRA 3008(h) Administrative Order on Consent. The last six draft RFI reports that were reviewed by the EPA and NYSDEC were made final in 1997. (See *Current Issues and Actions* [p.lix]). Of the twelve SSWMUs, five have been identified to date as requiring no further action: #2, miscellaneous small units; #6, the low-level waste storage area; #7, the chemical process cell waste storage area; #10, the radwaste treatment system drum cell; and #12, the hazardous waste storage lockers.

Similarly, the seven remaining SSWMUs have been identified as requiring no immediate action other than continued groundwater monitoring: #1, the low-level waste treatment facility; #3, the liquid waste treatment system; #4, the high-level waste storage and processing area; #5, the maintenance shop leach field; #8, the construction and demolition debris landfill; #9, the Nuclear Regulatory Commission (NRC)-licensed disposal area (NDA); and #11, the New York State-licensed disposal area (SDA).

In addition to the twelve SSWMUs, sixteen rooms previously used during nuclear fuel reprocessing operations were evaluated in May 1994 under the RFI program, as required by the Consent Order. In December 1994 NYSDEC and the EPA reviewed the evaluation and issued a determination of no further action for eight of the rooms. At the same time, NYSDEC and the EPA requested additional information on the remaining eight rooms. In February 1995 the WVDP provided NYSDEC and the EPA with the information requested. On January 28, 1998 the EPA and NYSDEC completed their evaluation and concluded that the remaining rooms do not pose a significant threat for release of hazardous waste or hazardous constituents.

With the submittal of the final RFI reports in 1997 and the determination for the sealed rooms, the site has completed the investigation activities associated with the Consent Order, and groundwater monitoring will continue.

Waste Minimization and Pollution Prevention

The WVDP continued a long-term program to minimize the generation of low-level radioactive waste, radioactive mixed waste, hazardous waste, industrial waste, and sanitary waste as directed by Executive Order 12856, Federal Compliance with Right-to-Know and Pollution Prevention Requirements. Waste streams on-site also are separated into either waste from sources directly associated with the vitrification process or other nonvitrification sources.

Using 1993 waste-generation rates as a baseline for comparison, the WVDP plans to reduce the generation of low-level radioactive waste, radioactive mixed waste, and nonvitrification hazardous waste by 50% by December 31, 1999. The WVDP plans to reduce the generation of sanitary waste and nonvitrification industrial waste by 30% by the same date.

Toward that end, the WVDP set the following cumulative waste-reduction goals for 1997: a 34% reduction in the generation of low-level radioactive waste, radioactive mixed waste, and hazardous waste; a 22% reduction in nonvitrification industrial waste; and a 14% reduction in sanitary waste.

The waste reduction goals for wastes associated with vitrification operations were a 9% reduction in vitrification hazardous waste and a 6% reduction in vitrification industrial waste, compared to an annualized 1996 total of waste generated.

The WVDP greatly exceeded the 1997 reduction goals for all five waste categories. Low-level radioactive waste generation was reduced by 79%,

radioactive mixed waste generation by 38%, and nonvitrification and vitrification hazardous waste generation by 61% and 93% respectively. In a similar manner, nonvitrification industrial waste generation was reduced by 64% and sanitary waste generation by 47%.

The amount of vitrification-related acidic/caustic hazardous waste generated in 1997 was reduced by the use of elementary neutralization. This was offset by a 5% increase in the amount of industrial waste generated.

Specific accomplishments in waste minimization and pollution prevention during 1997 included the following:

- 7.3 metric tons (8.0 tons) of radioactively contaminated lead were decontaminated and free-released for reuse or recycling

- 105.0 metric tons (115.7 tons) of paper were recycled

- 97.0 metric tons (106.9 tons) of galvanized steel, carbon steel, and stainless steel were recycled

- 0.9 metric tons (1.0 ton) of hazardous materials were recycled

- 1.6 metric tons (1.7 tons) of nonhazardous, regulated materials were recycled.

Underground Storage Tanks Program

RCRA regulations also cover the use and management of underground storage tanks and establish minimum design requirements in order to protect groundwater resources from releases. The regulations, presented in Title 40, Code of Federal Regulations (CFR), Part 280, require underground storage tanks to be equipped with overfill protection, spill prevention, corrosion protection, and leak detection systems. New tanks must comply with regulations at the time of installation. Facilities with tanks in service on December 22, 1988, were allowed a ten-year grace period to achieve compliance by completing the upgrades.

New York State also regulates underground storage tanks through two programs, petroleum bulk storage (Title 6, New York Official Compilation of Rules and Regulations [NYCRR], Parts 612 — 614) and chemical bulk storage (6 NYCRR, Parts 595 — 599). The state registration and minimum design requirements are similar to those of the federal program except that petroleum tank fill ports must be color-coded using American Petroleum Institute standards to indicate the product being stored. The WVDP does not use underground chemical bulk storage tanks.

The WVDP previously stored petroleum products in three regulated, 2,000-gallon underground storage tanks. Two of the tanks contained unleaded gasoline. The third tank contained low-sulfur diesel fuel. These three tanks were decommissioned in 1997. (Two aboveground storage tanks encased in concrete are now used in lieu of the former underground storage tanks. One of the aboveground tanks has a capacity of 1,000 gallons and contains low-sulfur diesel fuel. The second tank has a capacity of 2,000 gallons and contains unleaded gasoline. See *New York State-regulated Aboveground Storage Tanks* [p.xlix] for more detail.)

The three former petroleum-storage tanks were decommissioned by excavation and removal in accordance with state and federal regulations. Soil samples were collected from the tank excavations and analyzed according to regulatory guidelines. No petroleum compounds were detected in the tank excavation soil samples. (A fourth tank closed in place before this program was implemented was also removed. The removal is discussed under

Petroleum and Chemical-Product Spill Reporting [p. lvi] and under *Current Issues and Actions, Petroleum-Spill Reporting/Underground Storage Tanks Program* [p. lx]).

A 550-gallon underground storage tank is used to store diesel fuel for the standby power supply for the supernatant treatment ventilation blower system. This tank, a double-walled steel tank with an interstitial leak detection system, is filled by a metered delivery system and is monitored through daily gauging and monthly reconciliations. This tank does not require tightness or integrity testing because of its integral leak detection system. In 1997 the underground piping associated with this tank was removed and replaced with aboveground piping, and an overflow catch basin was installed at the fill port. System improvements planned for 1998 include a new leak detection system and a high-level warning device. The 1997 improvements and planned 1998 upgrades will bring the 550-gallon tank into compliance with the most recent EPA requirements, which become effective December 22, 1998.

New York State-regulated Aboveground Storage Tanks

The state of New York regulates aboveground petroleum bulk storage under 6 NYCRR Parts 612, 613, and 614. Aboveground hazardous bulk chemical storage is regulated by New York State under 6 NYCRR Part 595 et seq. These regulations require secondary containment, external gauges to measure the current reserves, monthly visual inspections of petroleum tanks, and documented daily, annual, and five-year inspections of chemical tanks. Furthermore, petroleum tank fill ports must be color-coded, and chemical tanks labeled to indicate the product stored.

WVDP registration at the end of 1997 included nine aboveground petroleum tanks and fourteen aboveground chemical storage tanks. Three of the petroleum tanks contain No. 2 fuel oil, one contains unleaded gasoline, and the remainder contain diesel fuel. Eleven of the chemical storage tanks contain nitric acid or nitric acid mixtures. Sulfuric acid, sodium hydroxide, and anhydrous ammonia are stored in the remaining three tanks. All of the tanks are equipped with gauges and secondary containment systems.

The Quality Assurance department inspects the aboveground petroleum tanks every month. In December 1997, all aboveground chemical storage tanks were inspected to fulfill the requirements for annual inspection (6 NYCRR Part 598.7(c)). No violations were noted during the inspection. Documentation relating to these periodic inspections is maintained by the WVDP and is available for review by regulatory agencies.

Medical Waste Tracking

Medical waste poses a potential for exposure to infectious diseases and pathogens from contact with human bodily fluids. Medical evaluations, inoculations, and laboratory work at the on-site nurse's office regularly generate potentially infectious medical wastes that must be tracked in accordance with NYSDEC requirements (6 NYCRR Part 364.9). The WVDP has retained the services of a permitted waste hauler and disposal firm to manage the medical wastes generated. Medical wastes are sterilized with an autoclave by the disposal firm to remove the associated hazard and then disposed. Sixteen kilograms (35 lbs) of medical waste were generated and disposed in 1997, with approximately 4 kilograms (9 lbs) consisting of needles, syringes, and other sharps, and 12 kilograms (26 lbs) consisting of dressing and protective clothing such as rubber gloves.

Clean Air Act (CAA)

The Clean Air Act (CAA), as amended in 1990, including Titles I through VI, establishes a frame-

work for the EPA to regulate air emissions from both stationary and mobile sources. These amendments mandated that each state establish an operating permit program for sources of air pollution. In 1996 NYSDEC amended 6 NYCRR Parts 200, 201, 231, and 621 to implement the new EPA Clean Air Act Title V permitting processes requirements. In New York State, either the EPA or NYSDEC issues permits for stationary sources emitting regulated pollutants, including hazardous air pollutants. Sources requiring permits are those that emit regulated pollutants in quantities above a predetermined threshold that are from a particular source such as a stack, duct, vent, or other similar opening. WVDP radiological emissions are regulated by the EPA, and all other air pollutants are regulated by NYSDEC.

Emissions of radionuclides from the WVDP are regulated by the EPA under the National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations, 40 CFR Part 61, Subpart H, "National Emission Standards for Emission of Radionuclides Other Than Radon From Department of Energy Facilities." The WVDP currently has permits for seven radionuclide sources, including the slurry-fed ceramic melter and the vitrification heating, ventilation, and air conditioning (HVAC) system. Other less significant sources of radionuclide emissions, such as those from the on-site laundry, do not require permits. Non-point radiological sources of emissions such as lagoons and soil piles also do not require permits. Emissions from all these sources are quantified for reporting purposes to the EPA. The WVDP reports the radionuclide emissions from its non-permitted and permitted sources to the EPA annually in accordance with NESHAP regulations. Calculations to demonstrate compliance with NESHAP radioactive dose limits showed 1997 doses to be less than 0.5% of the 10 millirem standard.

Nonradiological point sources of air emissions are regulated by NYSDEC. In 1996 NYSDEC amended 6 NYCRR Part 201 to implement the new EPA Clean Air Act Title V permitting requirements. These regulations require that major source facilities must file a Title V permit application unless operating limits are established to ensure that the facility does not emit pollutants above the threshold limits. WVDP emissions of nitrogen oxides (NO_x) and sulfur dioxide (SO_2) are each capped at 100 tons per year, which relieves the WVDP from filing a Title V permit.

In lieu of a Title V permit application, the WVDP opted to file a State Facility Permit Application for the site. A State Facility Permit application containing data on two new boilers was filed in October 1997 and approved in January 1998. A State Facility Permit modification to include all remaining WVDP air emission sources was submitted in December 1997, and the WVDP is awaiting approval of this permit. Under the new State Facility Permit, compliance will be based on site-wide limits for all regulated constituents, and the totals for all will be recorded annually in an air emissions inventory.

Existing certificate-to-operate permits (COs) are in effect until the State Facility Permit modification is approved by NYSDEC. The WVDP has a total of fourteen COs for nonradiological point sources. On May 2, 1997 NYSDEC issued the certificate-to-operate for the vitrification facility off-gas system as requested by the WVDP in a letter submitted to NYSDEC on June 14, 1996 after the first Relative Accuracy Test Audit (RATA) of the NO_x abatement and monitoring system of the vitrification facility off-gas system. On April 22, 1997, a second RATA was conducted. Representatives from NYSDEC Region 9, Division of Air Resources, visited the site to observe the 1997 NO_x RATA. (The WVDP submits quarterly reports to NYSDEC that contain NO_x and SO_2 total emissions data. These totals were well below the 100-ton cap for each category.)

One reportable toxic air emission exceedance occurred in 1997, during which an estimated 7.41

lbs of ammonia were released from the main plant ventilation stack over a period of seventy-five minutes, exceeding the permitted limit for ammonia. This release was not considered a threat to human health or the environment and no emergency response actions were required. Upon review of the existing permitted limit for ammonia it was determined by NYSDEC and the WVDP that the original limit of 1.845 lbs/hr had been derived using incorrect values. The limit was corrected to 10 lbs/hr as of January 5, 1998. This new limit is still significantly less than the amount considered a threat to human health or the environment. Under this revised permissible limit, the 7.4-lb release would not have been an exceedance.

The air permits that were in effect at the WVDP in 1997 are listed in *Appendix B*, Table B-3 (pp. B-5 through B-7).

Emergency Planning and Community Right-to-Know Act (EPCRA)

The Emergency Planning and Community Right-to-Know Act (EPCRA) was enacted as Title III of the Superfund Amendments and Reauthorization Act (SARA). EPCRA was designed to create a working partnership between industry, business, state and local governments, public health and emergency response representatives, and interested citizens. EPCRA is intended to address concerns about the effects of chemicals used, stored, and released in local communities.

Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, requires all federal agencies to comply with the following EPCRA provisions: planning notification (Sections 302 — 303), extremely hazardous substance (EHS) release notification (Section 304), material safety data sheet (MSDS)/chemical inventory (Sections 311 — 312), and toxic release inventory (TRI) reporting (Section 313).

The WVDP continued to comply with these provisions in 1997 as indicated on the table below.

- WVDP representatives attended and participated in semiannual meetings of the Cattaraugus County Local Emergency Planning Committee (EPCRA Section 302-303). WVDP representatives also attended numerous meetings held by the Cattaraugus and Erie County Emergency Management Services concerning WVDP and other local emergency planning activities. Area hospitals and the West Valley Volunteer Hose Company continued to participate in on-site training drills and in information exchanges involving hazardous-substance management at the WVDP.

EPCRA 302-303:			
Planning Notification	[√] Yes	[ ] No	[ ] Not Req.
EPCRA 304:			
EHS Release Notification	[ ] Yes	[ ] No	[√] Not Req.
EPCRA 311-312:			
MSDS/Chemical Inventory	[√] Yes	[ ] No	[ ] Not Req.
EPCRA 313:			
TRI Reporting	[√] Yes	[ ] No	[ ] Not Req.

- Compliance with all EPCRA reporting requirements was maintained and all required reports were submitted within the required time frame. There were no releases of extremely hazardous substances (EHS) at the WVDP that triggered the release notification requirements of EPCRA Section 304.

• Under EPCRA Section 311 requirements, the WVDP reviews information about reportable chemicals every quarter. If a hazardous chemical, which was not previously reported, is present on-site in an amount exceeding the threshold planning quantity, an MSDS and an updated hazardous chemical list is submitted to the state and local emergency response groups. This supplemental reporting continues to ensure that the public and the emergency responders have current information about hazardous chemicals at the WVDP. No new chemicals were added to the hazardous chemicals list in 1997, and no additional EPCRA Section 311 notifications were required.

• Under EPCRA Section 312 regulations, the WVDP submits annual reports to state and local emergency response organizations and fire departments that specify the quantity, location, and hazards associated with chemicals stored on-site. The number of reportable chemicals did not change between 1996 and 1997: sixteen reportable chemicals above threshold planning quantities were stored at the WVDP in 1997.

• Under EPCRA Section 313 requirements, the WVDP submitted a toxic release inventory (TRI) report to the EPA in 1997 for three chemicals — nitric acid, ammonia, and nitrate compounds.

• All notifications required under SARA regulations were submitted ahead of schedule.

Clean Water Act (CWA)

Section 402 of the Clean Water Act (CWA) of 1972, as amended, authorizes the EPA to regulate discharges of pollutants to surface water and groundwater through a National Pollutant Discharge Elimination System (NPDES) permit program. The EPA has delegated this authority to the state of New York, which issues State Pollutant Discharge Elimination System (SPDES) permits for discharges to surface water and groundwater.

Section 404 of the CWA regulates the development of areas in and adjacent to the waters of the United States. Supreme Court interpretations of Section 404 have resulted in the inclusion of wetlands in the regulatory definition of waters of the United States. (Article 24 of the New York State Environmental Conservation Law also contains requirements for the protection of freshwater wetlands.) While Section 402 generally regulates disposal of liquids, Section 404 provides regulatory controls for the disposal of solids, in the form of dredged or fill material, into these areas by granting the U.S. Army Corps of Engineers the authority to designate disposal areas and issue permits for these activities.

In addition, Section 401 of the CWA requires applicants for a federal license or permit pursuant to Section 404 to obtain certification from the state that the proposed discharge complies with effluent and water quality-related limitations, guidelines, and national standards of performance identified under sections 301, 302, 303, 306, 307, and 511(c) of the CWA.

SPDES-permitted Outfalls

Point source liquid effluent discharges to surface waters of New York State are permitted through the New York SPDES program. The WVDP has four SPDES-permitted outfalls, which discharge to Erdman Brook and Frank's Creek.

• Outfall 001 (WNSP001) discharges treated wastewater from the low-level waste treatment facility (LLWTF) and the north plateau groundwater recovery system. (See *Groundwater Treatment* below [p.lv] and ***Chapter 3, Groundwater Monitoring,*** *Special Groundwater Monitoring*, p. 3-15). The treated wastewater is held in la-

goon 3, sampled and analyzed, and periodically released after notifying NYSDEC.

In 1997 the treated wastewater from the LLWTF was discharged at WNSP001 in six batches that totaled 44.0 million liters (11.6 million gal) for the year. The annual average concentration of radioactivity at the point of release was 22% of the DOE derived concentration guides (DCGs). None of the individual releases exceeded the DCGs.

- Outfall 007 (WNSP007) discharges the effluent from the site sanitary and industrial wastewater treatment facility, which treats sewage and various nonradioactive wastewaters from physical plant systems (e.g., water plant production residuals and boiler blowdown). The average daily flow at WNSP007 in 1997 was 68,100 liters (18,000 gal).

- Outfall 008 (WNSP008) discharges groundwater and storm water flow directed from the northeast side of the site's LLWTF lagoon system through a french drain. The average daily flow at WNSP008 in 1997 was 7,400 liters (2,000 gal).

- Outfall 116 is a sampling location in Frank's Creek that represents the confluence of outfalls 001, 007, and 008, base flow, wet weather flows (e.g., storm water runoff), groundwater surface seepage, and augmentation water (i.e., untreated water from the site reservoirs). This is not a physical outfall but a location identified in order to demonstrate compliance during discharge of lagoon 3. Before discharge of lagoon 3, sample data for total dissolved solids (TDS) and flow measurements from upstream sources are used to calculate the amount of augmentation water and flow needed to maintain compliance with SPDES-permitted limits.

During 1997 effluent monitoring indicated that SPDES permit limits were exceeded twice at outfall 001, twice at outfall 008, and once at outfall 116. Although these exceedances did not have any

Month (No. of Exceedances)	**Parameter (Outfall)**	**Cause(s) / Corrective Action**
April (1)	TDS (116)	Changes in Frank's Creek background concentrations during 001 discharge./Use conductivity measurements for interim TDS measurements and analyze TDS in-house, thus allowing faster discharge and/or augmentation flow rate adjustments. Implemented as of October 6, 1997.
September (1)	BOD-5 (008)	Algae dislodged from outfall pipe and/or nonhomogenous seed and sample in dilution bottle./Increased number of sample dilutions from 3 to 5 for better confirmation of results. Implemented as of November 1, 1997.
December (2)	Nitrite (001)	Backflushing anthracite filter with nitric acid wash resulted in excessive levels of nitrate (at 4 ppm) that disrupted the natural nitrification cycle. Natural conversion also slowed by cold weather./Replace anthracite filter with sand filter that does not need nitric acid wash. Implemented as of April 1, 1998.
December (1)	BOD-5 (008)	Algae dislodged from outfall pipe and/or nonhomogenous seed and sample in dilution bottle./Clean discharge pipe and use 300 mL-sample dilution bottles to increase seed and sample homogeneity. Targeted for implementation by July 1998.

significant adverse effect on the environment, the WVDP is continuing to work with NYSDEC to prevent the recurrence of these events. These exceedances are discussed in the following text.

• On April 24, 1997 the calculated TDS at outfall 116 was reported as 551 mg/L, which was above the daily maximum limit of 500 mg/L. This exceedance was attributed to the TDS value of the sample at WNSP006, obtained before the discharge, being reported as 234 mg/L. The predischarge calculation, which is in accordance with the SPDES permit and is based on then-available results, indicated that a calculated TDS value at outfall 116 would be 382 mg/L during discharge of lagoon 3. However, after the start of the discharge, a new sample result from WNSP006 with a TDS concentration of 620 mg/L became available. Because of the different sample results that had been obtained, an insufficient amount of augmentation water had been added at the beginning of the discharge.

• On September 26, 1997 BOD-5 was reported as 9.3 mg/L at outfall WNSP008, exceeding the daily maximum limit of 5.0 mg/L. On December 9, 1997 BOD-5 was reported as 5.9 mg/L at outfall WNSP008, which again exceeded the daily maximum limit. The suspected causes are algae dislodged from the outfall pipe and/or analytical anomalies inherent in the test and calculation methods. The outfall pipe has been replaced and the effect of seeding on the samples, especially the exertion of a false oxygen demand during sample incubation, is being examined.

• On both December 5 and December 9, 1997 nitrite as N at outfall 001 was reported as 0.2 mg/L, exceeding the daily maximum limit of 0.1 mg/L for this parameter. These exceedances were attributed to backflushing the anthracite filter with nitric acid solution, thus resulting in excessive amounts of nitrites being sent to lagoon 3 and subsequent disruption of the natural nitrification cycle. The nitrification cycle was further affected by cold weather. Both of these conditions slowed the natural conversion of nitrite to nitrate before the start of the discharge. Although results indicated elevated nitrite at outfall 001, monitoring data for the receiving stream, Frank's Creek, indicated that nitrite concentrations were within the water quality standard. The existing anthracite filter is scheduled to be replaced in May 1998 by a sand filter, which will not require a nitric acid wash.

The permit exceedances reported during calendar year 1997 resulted in NYSDEC issuing a warning letter on December 31, 1997. The letter indicated that continued violations could result in the initiation of enforcement actions.

On March 24, 1997 NYSDEC conducted its annual facility inspection. At the request of the inspector, the SPDES outfalls, the sanitary and industrial wastewater treatment facility, and the LLWTF were observed. No violations were noted during the inspection.

The WVDP obtained storm water characterization data through sampling and analysis in 1991 and submitted a storm water discharge permit application to NYSDEC on September 30, 1992. In early 1994, NYSDEC indicated that any future storm water discharge requirements would be incorporated into the WVDP's existing SPDES permit. In response to NYSDEC comments on the permit application, the WVDP monitored the discharge at eleven storm water outfalls in 1995. In April 1996 the WVDP submitted a SPDES permit application for storm water outfalls.

In March 1996 the WVDP submitted an application for a SPDES permit modification to increase the average flow of effluent from the north plateau groundwater recovery system from approximately 9.8 million liters (2.6 million gal) a year to approximately 39.7 million liters (10.5 million gal) a year. (See *Groundwater Treatment* [p.lv].) NYSDEC issued the draft SPDES permit

in June 1997 for public comment. The final permit is expected to be issued to the WVDP during the first half of 1998.

Wetlands

In 1993 a wetlands investigation was conducted within a portion of the WNYNSC, including the WVDP, to identify and delineate jurisdictional wetlands as defined under the Clean Water Act, Section 404, and/or those wetlands potentially subject to regulation as freshwater wetlands by the state of New York.

The investigation identified fifty-one wetland units on a 550-acre area that includes the 200-acre WVDP site and adjacent parcels north, south, and east of the site. A report documenting the wetlands investigation and delineation was submitted to the U.S. Army Corps of Engineers and NYSDEC in June 1994.

NYSDEC reviewed the report and inspected the site, determining that a group of eight contiguous wetlands met the criteria for regulation as a single unit. The group of eight contiguous wetland units, delineated by NYSDEC as a linked unit, will be included on the next available proposed amendment to the official New York State Freshwater Wetlands Map for Cattaraugus County.

Any work conducted within 100 feet of a New York State freshwater wetland requires NYSDEC approval. The WVDP notifies the U.S. Army Corps of Engineers and NYSDEC of those proposed actions that have the potential to affect any of the fifty-one wetland units and that are not specifically exempted from regulation or notification. One notification for minor maintenance and repair of a 5-foot section of rail bed was required in 1997. The work involved clearing accumulated sediment and debris from the drainage approach to and exit from the culvert underlying the rail bed section.

Groundwater Treatment

In November 1995 the WVDP installed a groundwater recovery system to mitigate the movement of strontium-90 contamination in the groundwater northeast of the process building. Two 15-foot deep recovery wells, installed near the leading edge of the groundwater plume, were designed to collect contaminated groundwater from the underlying sand and gravel unit. The treatment system uses an ion-exchange column to remove strontium-90 from the groundwater and is operated in conjunction with the LLWTF. After the groundwater is treated, it is discharged to lagoon 2, 4, or 5 at the LLWTF.

In March 1996 the WVDP submitted to NYSDEC an application for a SPDES permit modification to increase the average flow of effluent from the groundwater recovery system from approximately 9.8 million liters (2.6 million gal) a year to approximately 39.7 million liters (10.5 million gal) a year. In September 1996 a third recovery well was installed to improve groundwater capture and system performance. Approximately 20.8 million liters (5.5 million gal) were processed through the system in 1997.

The Project evaluated other technologies in 1996 to determine if there were more effective methods for treating the groundwater. Laboratory benchscale tests were conducted from July 1996 to December 1996 to determine the effectiveness of using phosphate-based materials to immobilize strontium-90 in soil and groundwater samples. In 1997 a report was issued on the laboratory benchscale test results, and it was decided that field testing of phosphate-related technologies would not be conducted at this time.

Petroleum- and Chemical-Product Spill Reporting

The WVDP has a Spill Notification and Reporting Policy to ensure that all spills are properly managed, documented, and remediated in accordance with applicable regulations. This policy identifies the departmental responsibilities for spill management and presents the proper spill control procedures. The policy stresses the responsibility of each employee to notify the main plant operations shift supervisor upon discovery of a spill. This first-line reporting requirement helps to ensure that spills are properly evaluated and managed.

Under a June 1996 agreement with NYSDEC regarding the agency's petroleum spill-reporting protocol, the WVDP is not required to report spills of petroleum products of 5 gallons or less onto an impervious surface that are cleaned up within two hours of discovery. Spills onto the ground of petroleum products of 5 gallons or less are entered in a monthly petroleum spill log. Spills of any amount that travel to waters of the state must be reported immediately to the NYSDEC spill hotline and entered in the monthly log. Spills of petroleum products that enter any navigable waters of New York State are reported to the National Response Center within two hours of discovery. Each monthly petroleum spill log is submitted to NYSDEC on the fifteenth day of the following month. In addition to the NYSDEC spill- and release-reporting regulations, the WVDP also reports spills of hazardous substances in accordance with reporting requirements under RCRA, the CAA, EPCRA, the CWA, and the Toxic Substances Control Act (TSCA).

Petroleum- and chemical-product spills were logged and evaluated throughout the year. Petroleum-contaminated soils encountered in 1997 during the excavation and removal of a previously decommissioned underground storage tank required that NYSDEC be notified immediately. This tank had been decommissioned in 1985 by filling it with concrete in accordance with then-current regulations. (See p. lx under *Current Issues and Actions* below.) No other immediate notifications relating to petroleum spills were required during 1997. No chemical spills exceeded the reportable quantities and, therefore, no spills required immediate reporting. All spills that occurred during 1997 were cleaned up in a timely fashion in accordance with the WVDP Spill Notification and Reporting Policy, thereby minimizing any effects on the environment. Debris generated during clean-up activities was characterized and dispositioned appropriately.

Safe Drinking Water Act (SDWA)

The Safe Drinking Water Act (SDWA) as amended in 1996, requires that each federal agency having jurisdiction over a federally owned or maintained public water system must comply with all federal, state, and local requirements regarding safe drinking water. Compliance with regulations promulgated under the SDWA in the state of New York is overseen by the New York State Department of Health (NYSDOH) through county health departments.

The WVDP obtains its drinking water from surface water reservoirs on the Western New York Nuclear Service Center (WNYNSC) site and is considered a non-transient, noncommunity public water supplier. The WVDP's drinking water treatment facility purifies the water by clarification, filtration, and chlorination before it is distributed on-site.

As an operator of a drinking water supply system, the WVDP collects routine drinking water samples to monitor organic and inorganic water quality. The results of these analyses are reported to the Cattaraugus County Health Department. The Cattaraugus County Health

Department also independently collects a sample of WVDP drinking water every month to determine bacterial and residual chlorine content. Analysis of the microbiological samples collected in 1997 produced satisfactory results and the free chlorine residual measurements in the distribution system were positive on all occasions, indicating proper disinfection.

From 1993 to 1997 the WVDP conducted sampling and testing for lead and copper in the site's drinking water in accordance with EPA and NYSDOH regulations. Previous analytical results had shown lead levels to be above the action level of 15μg/L at several locations in the distribution system. NYSDOH regulations require an evaluation of potential water treatment actions and the preparation of a corrosion control plan for water systems that do not meet the lead and copper action levels. Because two consecutive lead and copper sample rounds were below the EPA action levels in 1996, the site was not required to implement the state-designated corrosion control program. In addition, the WVDP was allowed to reduce the sampling frequency and number of sampling sites.

During 1996 and through 1997, the WVDP replaced existing water faucets with lead-free faucets and completed weekly water-system line flushes in an effort to lower the lead levels. Lead and copper sampling in 1997 indicated that all results were below the action levels for these metals. Sampling for lead and copper will be continued in the summer of 1998 and again in 1999. If these sampling rounds produce results below the action levels for lead and copper, regulations will allow the WVDP to reduce sampling to every three years.

The Cattaraugus County Health Department conducted its annual inspection of the WVDP water supply system on October 21, 1997. No findings or notices of violation were issued.

Toxic Substances Control Act (TSCA)

The Toxic Substances Control Act (TSCA) of 1976 regulates the manufacture, processing, distribution, and use of chemicals, including asbestos-containing materials (ACMs) and polychlorinated biphenyls (PCBs). Because PCBs are a listed hazardous waste in New York State, the WVDP continued in 1997 to manage radioactively contaminated PCB wastes as radioactive mixed wastes. These wastes originated from a dismantled hydraulic power unit inside the former reprocessing facility, from two radiologically contaminated capacitors that contained PCB fluids, and from the cleanup of a transformer leak. Details concerning PCB-contaminated radioactive waste management, including a description of the waste and proposed treatment technologies and schedules can be found in section 3.1.5 of the Site Treatment Plan, Fiscal Year 1997 Update (West Valley Nuclear Services Co., Inc. February 1998).

To comply with TSCA, all operations associated with PCBs comply with the PCB and PCB-Contaminated Material Management Plan (West Valley Nuclear Services Co., Inc. February 1, 1996). The WVDP also maintains an annual document log that details PCB use and appropriate PCB waste storage on-site and any changes in storage or disposal status. In August 1996 the DOE and the EPA entered into a Federal Facility Compliance Agreement on Storage of Polychlorinated Biphenyls allowing the storage of PCB wastes for more than the one-year statutory limit for storage under TSCA.

In 1997 the WVDP also continued to maintain compliance with all TSCA requirements for asbestos by managing asbestos-containing materials (ACMs) at the site in accordance with the Asbestos Management Plan (West Valley Nuclear Services Co., Inc. May 1, 1996). The plan includes requirements for limiting worker exposure to ACMs, requirements for asbestos-abatement

projects, maintenance activities, and periodic surveillance inspections (at least once every three years). The plan also identifies the inventory and status of on-site ACM.

Activities in 1997 included the repair or abatement of damaged/friable ACM, removal of roofing materials containing asbestos, and the maintenance of signs and labels to warn workers of ACM. (See also p. lxi under *Current Issues and Actions*.)

National Environmental Policy Act (NEPA)

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes a national policy to ensure that protection of the environment is included in federal planning and decision making (Title I). Its goals are to prevent or eliminate potential damage to the environment that could arise from federal legislative actions or proposed federal projects. The President's Council on Environmental Quality (CEQ), established under Title II of NEPA, sets the policy for fulfilling these goals. The CEQ regulations for implementing NEPA are promulgated at 40 CFR Parts 1500 — 1508.

The DOE began revising its NEPA-compliance procedures and guidelines in 1990. On May 26, 1992 the President's Council on Environmental Quality approved the DOE's NEPA procedures, which are promulgated at 10 CFR Part 1021. In July 1996 the DOE amended the NEPA procedures.

NEPA requires that all federal agencies proposing actions that have the potential to significantly affect the quality of human health and the environment prepare detailed environmental statements. The DOE implements NEPA by requiring an environmental review of all proposed actions (10 CFR Part 1021). The DOE's NEPA procedures embody a hierarchical system of assessment for reviewing and documenting proposed actions commensurate with the action's potential for affecting the environment. Reflecting least to greatest significance, the levels of review and documentation are: no impact and categorical exclusion; potential impact and an environmental assessment; and significant impact and an environmental impact statement. (See pp. 1 and 3 in the *Glossary*.)

Several proposed actions at the WVDP were reviewed in 1997 under the Department of Energy's NEPA-implementing regulations:

- sorting of radioactively contaminated soil
- modification of the WVDP wastewater treatment facility equalization basin
- replacement of the low-level liquid waste treatment facility building
- construction of a site emergency vehicle shelter
- improvements to the WVDP's north parking lot
- construction of a site vehicle-maintenance support structure
- extension through 1997 of NEPA coverage of the 1996 routine maintenance activities list of proposed actions
- an applicability determination for replacement of four on-site fire hydrants
- an applicability determination for maintenance activities at off-site environmental monitoring stations
- removal of the nitric acid/caustic tank pad.

The first six proposed actions were categorically excluded under the NEPA-implementation rules and regulations. NEPA coverage for routine maintenance activities was extended for one year, and neither the routine maintenance at the five off-site environmental monitoring stations or at the Buttermilk Creek/Thomas Corners station required NEPA review. (In the latter instance a New York State permit was issued and no environmental review was required under the New York State Environmental Quality Review Act.) The removal of the nitric acid/caustic tank pad also was categorically excluded from additional NEPA review.

On January 7, 1997 the DOE Ohio Field Office Manager delegated approval authority for categorically excluded actions to the West Valley Demonstration Project (DOE-WV) NEPA compliance officer. This authority was granted to the DOE-WV based upon a proven history of the proper implementation of NEPA as well as on the Department of Energy's policy for improving the NEPA process.

Activities continued in 1997 in support of the Draft Environmental Impact Statement for Completion of the West Valley Demonstration Project and Closure or Long-Term Management of Facilities at the Western New York Nuclear Service Center.

Comments from the public on the draft EIS that were received during the six-month comment period are currently being evaluated. Having met throughout 1997 to review alternatives in the EIS, the Citizen Task Force will be preparing recommendations in 1998 to aid the WVDP in the selection of a preferred alternative. A supplement to the draft EIS that will identify a preferred alternative is being prepared. The supplement is scheduled to be issued in August 1999, and the final EIS is scheduled to be issued in April 2000. The Record of Decision is scheduled to be issued in May 2000.

In May 1997 the Department of Energy issued the Final Waste Management Programmatic Environmental Impact Statement to evaluate management and siting alternatives for the treatment, storage, and disposal of five types of radioactive and hazardous waste. The alternatives are for waste generated from operations over the next twenty years at fifty-four sites in the DOE complex. The preferred alternatives for WVDP waste include:

- off-site treatment of low-level mixed waste and disposal at one of two or three regional disposal sites

- on-site treatment of low-level waste and shipment for disposal to one of two or three regional disposal sites

- on-site treatment and storage of WVDP transuranic waste

- on-site storage of WVDP vitrified high-level waste pending disposal in an off-site geologic repository.

WVDP hazardous and solid waste will continue to be shipped off-site for treatment and disposal.

Summary of Permits

The environmental permits that were in effect at the WVDP in 1997 are listed in *Appendix B*, Table B-3 (pp. B-5 through B-7).

Current Issues and Actions

Resource Conservation and Recovery Act (RCRA)

RCRA Facility Investigation

In 1997 the WVDP continued to monitor and evaluate SWMUs to ensure compliance with the

requirements of the RCRA 3008(h) Administrative Order on Consent. Six of the previously submitted draft RFI reports that were reviewed by the EPA and NYSDEC were made final. Based on the results of the RFI for the maintenance shop leach field, two septic tanks that previously had received sanitary waste from the WVDP maintenance shop were cleaned and closed in 1997.

Clean Water Act (CWA)

Storm Water Discharge Permit Application

Precipitation can become contaminated with pollutants from industrial process facilities, stored industrial materials, material handling areas, access roads, or vehicle parking areas. To protect the environment, aquatic resources, and public health, Section 402(p) of the CWA requires that a storm water discharge permit application containing facility-specific information be submitted to the permitting authority. NYSDEC, the permitting authority in New York State, uses this information to ascertain the significance of releases of pollutants from storm water collection and discharge systems and to determine appropriate permitting requirements.

In 1992 the WVDP submitted an application for an individual permit for storm water discharges associated with industrial activity. The application included characteristic analytical results from sampling conducted at three locations in 1991. These monitoring locations not only comprised all storm water discharged from the WVDP but also included base flow for the receiving water at the sample points. NYSDEC requested that the sampling points be moved to locations with no base flow to differentiate the quality of the storm water discharges from the receiving water. In response to the request, thirty-two on-site monitoring points were identified in 1994. As CWA regulations allow petitioning to group identical discharges for monitoring and reporting, NYSDEC accepted the WVDP's petition to group several of the discharge points and eleven storm water outfalls were monitored in 1995.

Two samples were collected from each outfall, a first-flush sample collected within roughly the first half-hour of the storm event and a flow-weighted composite collected during the first three hours of the storm event. The storm water samples were analyzed for parameters identified in the existing SPDES permit. In April 1996, the WVDP submitted a SPDES discharge permit application that identified these outfalls. In June 1997 NYSDEC issued for public comment the draft SPDES permit that incorporated storm water outfalls. The WVDP submitted comments and is expecting a final permit in the first half of 1998 that encompasses the current outfalls, the storm water monitoring points, and the north plateau groundwater recovery system.

Petroleum-Spill Reporting/Underground Storage Tanks Program

An underground storage tank that had been used previously to store gasoline was excavated and removed in 1997. The tank had been located near the southwest corner of the main warehouse, and it was decommissioned in 1985 by filling it with concrete, in accordance with then-current regulations.

Petroleum-contaminated soils were encountered at the bottom of the excavation during the 1997 tank-removal project. Appropriate regulatory agencies were notified upon discovery of the contaminated soils. It was presumed that the leak had occurred before the tank had been decommissioned in 1985.

At the request of NYSDEC, a sampling and analysis plan was prepared to determine the affected media and to define the lateral and vertical extent of petroleum-contaminated soils. The field effort

for the sampling and analysis plan, including soil and groundwater sampling, was completed during December 1997, and the results are now being evaluated. Preliminary results indicate that the petroleum contamination is limited to the immediate vicinity of the former tank. A final report presenting the results of the sampling and analysis plan and remedial alternatives, if warranted, will be completed during early 1998.

Emergency Planning and Community Right-to-Know Act (EPCRA)

In the unlikely event of a radiological emergency requiring off-site response support, the WVDP maintains arrangements with local emergency response agencies. An agreement with Mercy Flight to provide helicopter transport from the site for worker medical emergencies was completed in 1997. An agreement also was negotiated with the Erie County Medical Center, the regional trauma center. Erie County Medical Center now participates with Bertrand Chaffee Hospital in training activities for the treatment of radiologically contaminated patients.

Toxic Substances and Control Act (TSCA)

In December 1997 a site-wide inspection was initiated to visually reinspect and reassess the condition of all confirmed and assumed asbestos-containing materials (ACM), to identify any suspected materials not previously addressed, to collect samples, and to record any changes in conditions or quantities of ACM in the inspection report. The inspection will be completed in 1998. If required, based on the conditions found during this inspection and on laboratory analysis results of the samples collected, specific asbestos-remediation response actions will be identified. The Asbestos Management Plan inventory and status tables also will be updated in 1998.

Project Assessment Activities in 1997

As the primary contractor for the DOE at the WVDP, WVNS conducted more than 164 reviews of environmentally related activities in 1997. These included one audit of environmental aspects of the vitrification process, two self-assessments of the environmental monitoring program, and 161 interdepartmental surveillances of environmental protection activities. The local DOE Project office also conducted a number of independent reviews of various aspects of the environmental program in 1997. Overall results of the reviews reflect continuing, well-managed environmental programs at the WVDP.

Significant external environmental overview activities in 1997 included an inspection by NYSDEC for compliance with RCRA; an inspection by NYSDEC for compliance with SPDES requirements; and an annual inspection of the WVDP potable water supply system by the Cattaraugus County Health Department. These inspections did not identify any environmental program findings and further demonstrated the WVDP's commitment to protection of the environment.